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UNCLAS SECTION 01 OF 03 KINGSTON 000427

SIPDIS SENSITIVE

STATE FOR WHA/CAR (ACADIEUX) (VDEPIRRO) (WSMITH)
WHA/EPSC (MROONEY)(FCORNEILLE)
EEB/ESC/IEC/EPC (MMcMANUS)
INR/RES (RWARNER)
SANTO DOMINGO FOR FCS AND FAS
TREASURY FOR ERIN NEPHEW
USTDA FOR NATHAN YOUNG AND PATRICIA ARRIAGADA
OPIC FOR ALISON GERMAK

E.O. 12958: N/A

TAGS: ECON ENRG SENV EMIN ASEC SOCI ETRD TRSY OPIC OAS

IBRD, JM, XL

SUBJECT: JAMAICA: POWER GENERATION, CAN YOU SPARE 200 MEGAWATTS

REF: A) KINGSTON 97 B) 08 KINGSTON 755 C) 08 KINGSTON 286 D) KINGSTON 405 E) 08 KINGSTON 703

11. (SBU) SUMMARY: Jamaica relies on imports of petroleum products to fuel fully 95 percent of its power generation. The Government of Jamaica (GOJ) spent nearly USD 3.4 billion in 2008 for imported fuel, a sum greater than total exports and up from USD 2.2 billion in 2007. Fluctuating fuel prices and deferred maintenance/upgrades of the electricity infrastructure contribute to the high electricity tariffs. Jamaica's competitiveness is weakened by high electricity costs, a factor that inhibits business investment. The GOJ is seeking to diversify power generation and secure cheaper fuel sources to fill the 600 megawatts (MW) of new power it will need in the next decade. Emboffs recently met with representatives from the power monopoly Jamaica Public Service (JPS) company who presented a summary of JPS' power generation capacity and its future plans. END SUMMARY.

Installed Capacity and Customers

¶2. (SBU) JPS is a vertically integrated electric utility and the sole retailer of electric power on the island, serving 590,000 customers. This includes 129 large-scale industrial customers and 60,000 small commercial operations; the remainder are residential and small retail operations. Fifty-five percent of demand is located around the capital Kingston and less than 8,000 customers account for 50 percent of total sales. Total installed capacity is 816 MW, including 621 MW controlled by JPS and 210 MW provided by Independent Power Producers (IPP). Peak demand is usually just over 620 MW; however, with the economic downturn, peak demand has declined slightly. Peak demand occurs in the evening, which is an inverse to developed countries where demand occurs during the day when offices are full and most production occurs. Demand growth requires at least 20 MW of new capacity per year. Replacement will require 200-300 MW in the next 4 to 5 years as close to half of the existing installed capacity is equipment that is nearly 30 years old.

Ownership Structure

13. (SBU) Japan-based Marubeni, which owned 80 percent of JPS, sold

half its stake to TAQA, the national energy company in Abu Dhabi, on March 22, (reftel A). The deal was part of a larger USD 320 million acquisition of a 50 percent equity stake in the existing Caribbean portfolio of Marubeni. The remaining 20 percent of JPS is held by the GOJ. Jamaica will need to increase its power capacity by 75 percent or 600 MW within a decade, of which 10 percent should be from renewable sources.

Power Generation

14. (SBU) JPS has four (4) oil-fired boiler, steam generating units in the area of Old Harbour Bay that provide nearly 220 MW. There are 36 MW in slow speed diesel generators in Rockfort, and 229.5 MW from nine General Electric (GE) combustion turbines using number 2 diesel fuel at the Bogue plant on the north coast near Montego Bay. There are 122.5 MW generated from three (3) steam turbine/combustion turbine fueled by number 2 diesel and number 6 oil located in Hunts Bay near Kingston. JPS also has eight small hydro electric plants (using either Sulzer or Harland Engineering turbines) that generate a total of 21.7 MW. A proposed expansion of 60-70 MW in hydro power has become economically viable now that oil prices are above USD 50 per barrel.

Independent Power Providers (IPP)

15. (SBU) The IPPs are broken down as follows: Jamaica Energy Partners (JEP) provides 74 MW and 50 MW from two barge-mounted power generation plants using medium-speed diesel engines burning heavy fuel oil. Jamaica Private Power Company (JPPC) owns a 60MW slow speed diesel thermal generator. Wigton windfarm generates 20.7 MW and will soon add nine new turbines bringing an additional 18 MW. Jamalco, a bauxite operation (owned 55 percent by Alcoa and 45 percent by the GOJ), generates 6 MW from steam cogeneration.

Tariff Schedule - 21.6 Percent Returns

16. (SBU) JPS is regulated by the Office of Utilities Regulation (OUR). The tariff regime provides JPS the opportunity to recover costs (both fuel and non fuel, subject to certain adjustments) and earn a minimum equity return of 14.85 percent. During the meeting with Emboffs, representatives of JPS said the average U.S. utility earns a return on equity (ROE) of 11 percent; while JPS earns an ROE of 21.6 percent. The tariff rates are reset every five years; the next reset is scheduled for June 1, 2009. JPS is seeking a 22.8 percent increase in the non-fuel portion of its tariff. JPS said it anticipates profits of between USD 54 million to USD 84 million for 2009, depending on the new tariff rate.

Tariff Rates Trends

17. (SBU) Kilowatt per hour (kWh) rates have risen significantly in recent years, mostly because of rising fuel costs. Rates rose from USD 16.2 cents per kWh in 2003, to USD 20.5 cents per kWh in 2005, USD 30.8 cents per kWh in 2008, with a July peak of USD 38.8 cents per kWh. The non-fuel component of fees during these years has risen only modestly from USD 8.7 cents in 2003, to USD 9.7 cents in 2005, to USD 10.2 cents in 2008, thus highlighting the rise in percentage cost because of fuel. Similar to fuel risks, JPS does not take on any currency exchange risk; it passes these costs on to the customer. JPS is known for high-paying salaries and has a strong union; its status as a monopoly provider allows it to pass most costs on to customers, while reaping a respectable profit. Unfortunately, this may result in little incentive on the part of JPS to cut costs through efficiencies.

Energy Costs Crater Bauxite

18. (SBU) Bauxite is one of the three largest foreign exchange earners in Jamaica, along with tourism and remittances. The country's bauxite industries historically use 40 percent of total energy production. In addition, 50 percent of production costs for bauxite are from energy. Rising energy costs have led to the shutdown of three bauxite plants, which were among the most cost

inefficient in the world because of high energy tariffs. (reftel D). Jamalco, a bauxite operation, was only able to survive because of its 6 MW from steam cogeneration. Jamalco has a USD 1 billion expansion on hold as it awaits lower energy costs in Jamaica.

23 Percent Technical and Theft Losses

19. (SBU) Technical losses are 10 percent of production, and Non-technical losses (theft) are 13.2 percent. JPS has embarked on several media campaigns to curb theft, but if one drives through many of Kingston's neighborhoods a cobweb of illegal connections are visible. JPS says it is deploying new technology that will reduce electricity thefts; achieving a total technical and non technical loss of 16.5 percent by 2014.

Future Plans

- 110. (SBU) Minister of Energy James Robertson told Emboffs on May 13 that it is crucial for Jamaica to diversify into renewable energy sources. He also said he wants to move toward liquefied natural gas (LNG) as part of a new energy policy he intends to release by July. Robertson said coal could be an option, but he is focusing primarily on LNG. JPS said it would like to create a 300 MW coal project located near Old Harbour Bay with a target date of 2015. JPS and state-owned oil refinery Petrojam and its parent company, the Petroleum Corporation of Jamaica (PCJ), signed a deal in July to build a new USD 300 million petcoke co-generation power plant in Kingston that would come online in 2012 (Reftel E). (NOTE: Given the GOJ current cash crunch and reliance on debt, any new projects will have to be led by foreign direct investment, END NOTE).
- 111. (SBU) The GOJ hopes to add 20 to 35 MW of electricity from a proposed waste-to-energy project. Post and its partners at U.S. Trade and Development Agency (USTDA) and the Overseas Private Investment Corp (OPIC) have worked closely with the GOJ on this project. JPS said it will conduct a few upgrade projects in 2009 that will add 10 MW at the Bogue plant, 2 MW through a new turbocharger at the Rockfort plant, upgrades to a hydro plant in Constant Spring that will bring 1 MW, and possibly 3 MW of new wind turbines at Munro College. JPS says it would like to have a total of 63.75 MW of new wind by 2017.

COMMENT

- 112. (SBU) The GOJ has expressed the desire to implement an energy diversification policy, but to date only the roll out of E-10 ethanol (reftels) has yielded actual results. Most of the other projects are at the early stages or appear to be hampered by small thinking. Despite having sufficient wind data available already, Jamaica initiated small 20 MW projects instead of seeking larger investments for 100 to 150 MW. This effort would benefit from economies of scale and preferably bring in a foreign partner. After a significant spike in world oil prices hurt Jamaica's economy, it is surprising that the GOJ is not being more aggressive in implementing programs to help curb demand and improve conservation. Discussions of creating net metering or net billing legislation started last year by then Minister Clive Mullings do not appear to have progressed much.
- 113. (SBU) In a telling example, a USG electrical engineer visiting JPS's power plants commented to Emboff that JPS could significantly improve efficiency and lower production cost by standardizing some of its turbines and cutting staff. When this suggestion was relayed to JPS XXXXXXXXXXX, he responded that there is no political will for such projects. Given the high salaries paid by JPS and its ability to pass through most costs, his assessment may have referred more to JPS thinking than to that of the GOJ. Jamaica's reliance on imported fuel makes it susceptible to any future oil spikes, placing further strains on limited resources and choking future economic growth because of high energy costs.